

ORT1273

WHAT IS CLAIMED IS:

1. An isolated and purified nucleic acid molecule that encodes protease D-G protein, said nucleic acid molecule comprising a member selected from a group consisting of:
 - 5 (a) a nucleic acid molecule encoding a protein having at least a 70% identity to a polypeptide comprising amino acids 1 to 435 encoded by SEQ ID NO:2;
 - (b) a nucleic acid molecule encoding a protein having at least a 70% identity to a polypeptide comprising amino acids 1 to 292 encoded by SEQ ID NO:9
 - (b) a nucleic acid molecule which is complementary to either one of the
 - 10 polynucleotides (a) or (b) ;
 - (c) a nucleic acid molecule comprising at least 15 sequential bases of either one of the polynucleotides (a), (b), or (c); and
 - (d) a nucleic acid molecule that hybridizes under stringent conditions to either one of the polynucleotide molecules of (a) or (b).
- 15 2. The nucleic acid molecule of claim 1 wherein the polynucleotide is RNA.
3. The nucleic acid molecule of claim 1 wherein the polynucleotide is DNA.
- 20 4. The isolated and purified nucleic acid molecule of claim 1, having a nucleotide sequence selected from a group consisting of: (SEQ.ID.NO.:1), (SEQ.ID.NO.:8) and functional derivatives thereof.
5. The isolated and purified nucleic acid molecule of claim 1, wherein said nucleic
- 25 acid molecule is genomic DNA.
6. An expression vector for expression of a protease D-G protein in a recombinant host, wherein said vector contains a nucleic acid sequence encoding proteolytically active protease D-G protein and functional derivatives thereof.

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7. The expression vector of claim 6, wherein the expression vector contains a nucleic acid molecule encoding protease D-G protein, having a nucleotide sequence selected from a group consisting of: (SEQ.ID.NO.:1); (SEQ.ID.NO.:8); and functional derivatives thereof.

8. The expression vector of claim 6, wherein the expression vector contains genomic DNA encoding protease D-G protein.

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12. A protein, in substantially pure form having protease D-G proteolytic activity.

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13. The protein according to claim 12, having an amino acid sequence selected from a group consisting of: (SEQ.ID.NO.:2), (SEQ.ID.NO.:9) and functional derivatives thereof.

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14. A monospecific antibody immunologically reactive with protease D-G protein.

15. A process for expression of protease D-G protein in a recombinant host cell, comprising:

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(a) transferring the expression vector of Claim 6 into suitable host cells; and

(b) culturing the host cells of step (a) under conditions which allow expression of the protease D-G protein from the expression vector.

a) incubating a test compound, proteolytically active protease D-G protein, and a labeled substrate for sufficient time to produce a detectable product as a result of proteolytic activity upon the labeled substrate; and

b) measuring a change in the quantity of product as a result of test compound modulation of protease D-G proteolytic activity on the labeled substrate when compared to protease D-G proteolytic activity on the labeled substrate in the absence of test compound.

17. The method of claim 16 wherein the labeled substrates comprises a detectable label selected from a group consisting of a radiolabeled atom, at least one fluorescent molecule, and a colorimetric molecule.

18. The method of claim 17 wherein the substrate is labeled with two fluorescent molecules, and the detectable molecule is detected by fluorescent resonant energy transfer.

19. A compound active in the method of Claim 16, wherein said compound is a modulator of protease D-G proteolytic activity.

20. A compound active in the method of Claim 16, wherein said compound is an agonist or antagonist of protease D-G proteolytic activity.

21. A compound active in the method of Claim 16, wherein said compound is a modulator of expression of protease D-G.

22. A pharmaceutical composition comprising a compound active in the method of Claim 16, wherein said compound is a modulator of protease D-G proteolytic activity.

23. A method of treating a patient in need of such treatment for a condition which is mediated by protease D-G, comprising administration of a protease D-G modulating compound active in the method of Claim 16.

Year	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
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